

### **REMARKS/ARGUMENTS**

In the Final Office Action mailed December 10, 2009, claims 1, 5-6, 10-11 and 15-29 were rejected. Without conceding the propriety of the rejections, Applicants respectfully traverse the rejections.

Applicants have thoroughly reviewed the outstanding Office Action including the remarks and the references cited therein. The following remarks are believed to be fully responsive to the Office Action. All the pending claims at issue are believed to be patentable over the cited references.

Applicants would first address the issue of the publication date of the supporting document submitted as Exhibit 1 with the 37 C.F.R. §1.131 Affidavit ("Affidavit") filed on August 11, 2009. The affidavit states that "[a] Product Requirement Specifications (PRS) document was created, showing the conception of the invention in the above identified application, at least as early as July 6, 1998," (see Affidavit, Page 1, section 4). The Office Action states that the date on the cover of the supporting document shows that the document was created on March 25, 2009. Applicants would like to explain that the reason for the discrepancy is that the date on the cover of the supporting document is a macro which automatically puts the present date on the cover of the supporting document, thus March 25, 2009, is the date the supporting document was printed and not the date it was created. Further support for the date claimed in the Affidavit can be found on the third page of the supporting document where both a copyright date of 1995 and a revision date of 2/8/95 are printed in the document, thus showing that the document was in existence to support a claim of conception at least as early as July 6, 1998.

### CLAIM REJECTIONS – 35 U.S.C. §103

Claims 1, 5, 6, 10, 11 and 15-29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Li (U.S. Application Publication No. 2002/0072808, “Li”) in view of Kirkevold *et al.* (U.S. Patent No. 6,263,322; “Kirkevold”).

The following description details what the Office Action alleges is disclosed by the Li and Kirkevold cited references:

For claims 1, 6, 11, 20-21, 23-25, and 28-29, Li discloses a system and method for providing vehicle information. Li discloses a system where a user (vehicle owner or automotive repair shop service associate, any user) can enter information concerning a given vehicle and the system can then analyze that information to give a diagnosis of what may be wrong with the vehicle (done via a processor as claimed). A service solution is determined as claimed. The system also can determine the warranty status of the vehicle based on the diagnosis of the problem (is problem covered under warranty, yes or no, see figure 11 of Li). See figure 17 and paragraph 61 where it is disclosed that the vehicle identification information is entered. The “means for entering the vehicle identification information” is satisfied by the computer interface 80 that allows entry of the claimed type of data. Figure 17 shows the VIN number being entered, which identifies the vehicle. The vehicle problem information entered into the system by the user is the claimed diagnostic information, which is analyzed to arrive at a service solution (using service information as claimed). See paragraph 42 for a disclosure of comparing the received diagnostic information to a symptoms database 90 to determine a diagnosis. The “means of comparing” the received diagnostic information with reference information is module 30, that compares received vehicle diagnostic information to a symptoms database to determine a diagnosis. This module 30 also satisfies the claimed “means for identifying at least one service solution.” The results are then displayed as claimed, which also satisfies the claimed “means for displaying,” which is just a display. Databases are used to store the data (for claim 11). Also, see paragraph 45 where it is disclosed that there is a warranty module 41 that identifies warranty solutions, this satisfies the claimed “*means for identifying if the at least one service solution is covered under warranty.*”

Not disclosed by Li is that the diagnostic information is received “*directly from diagnostic equipment.*” In Li, the data is entered manually and applicant is claiming a situation that is

representative of an automated collection of vehicle diagnostic data. Also not disclosed *for only claim 1* is that the vehicle identification information is entered by a mechanic.

Kirkevold discloses an auto repair shop computer system that manages just about every aspect of a repair shop that one can think of. It is specifically disclosed that the computer system includes *diagnostic* equipment (see figure 1, #1, 12, 14, 16) that analyzes data taken from vehicle to *diagnose a problem*. For example, see column 9, line 56 to column 10, line 18. The operator of the diagnostic equipment satisfies the claimed limitation of a mechanic, which is really just a title and is only defining a person. Clearly in the reference it is a repair technician (mechanic) that is operating the diagnostic equipment and repairing the vehicles. Kirkevold is disclosing the fact that it is well known in the auto repair art to take vehicle data directly from the vehicle analyzer components 52, that are connected to a vehicle by the repair technician (which is a mechanic and satisfies what is claimed). In Kirkevold, the diagnostic data that is used to diagnose the vehicle problem comes directly from diagnostic equipment that is connected to the vehicles (see figure 1). Also, the Examiner notes that Kirkevold recognizes that Diagnostic Trouble Codes can be retrieved from the on board computer of a vehicle, see column 11, lines 49-51. The on board computer satisfies an on board monitoring system as is claimed in claim 21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Li so that data concerning vehicle problems can be received directly from the diagnostic equipment that is operated by a repair technician (mechanic), as is taught by Kirkevold. This is very well known to one of ordinary skill in the art. The receipt of data directly from diagnostic equipment would be desirable because it allows for more complex troubleshooting to occur, such as the obtaining of data by the various devices disclosed by Kirkevold (engine analyzer, alignment analyzer, brakes analyzer, etc.) that allow for more complex problem analysis than the system of Li can provide with just user objective input. A repair technician (mechanic) would use diagnostic equipment connected to the vehicle, like the disclosed engine analyzer of Kirkevold. The repair technician (mechanic) could also connect to the vehicle's on board computer to obtain error codes (as is disclosed by Kirkevold) and this would then allow problem diagnosis to occur based on the received data. One of ordinary skill in the art would have found it obvious to collect the diagnostic data directly from diagnostic equipment that is operated by a mechanic so that a more accurate diagnosis can occur.

With respect to the claimed entering of the vehicle identification information by a mechanic, Li discloses that a person

enters this same information. It may be a customer or it may be an automotive repair shop service associate. The entering of the vehicle information can be done by anyone, it does not matter who is doing it. Because the rejection results in the vehicle diagnostic information being taken from diagnostic information operated by a mechanic, it would make sense that somebody such as a mechanic at the repair shop would also enter the vehicle identification information. The examiner also notes that it does not appear to matter who it is that enters the data. The method does not depend on a specific individual entering the information and the invention would perform the same if a person other than a mechanic entered the vehicle identification information. The specification does not disclose that having a mechanic enter the vehicle identification information solves any particular problem or that this produces any unexpected result. It also makes sense that if an automotive repair shop service associate is able to enter the information that it would have been obvious to try and have a mechanic also enter the information (maybe the service associate is out sick that day). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the mechanic enter the vehicle identification information for the above reasons.

Li discloses a computer-base warranty administration system that includes a dialog manager for collecting service information regarding a vehicle from a user (*see* Li, Abstract). “The system also has an artificial intelligence based reasoning module for analyzing the service information to determine a diagnosis.” (*see* Li, Abstract). “The system further includes a repair processing module for administering warranty-specific service based on the diagnosis and the service information.” (*see* Li, Abstract).

In operation, the Li system uses the dialog manager to collect service information regarding a vehicle from the user via a computer interface located either at the user’s home via network connection (internet) or at the location of service (*see* Li, Page 2, par. 40). The user, a customer or a service associate, can enter information such as that a 30,000 mile service is needed and that the car pulls to the right, that the car is experiencing low gas mileage, or a service requested (*see* Li, Pg. 2, par. 44; Page 3, par. 55; and Pg. 4, par. 56). “The case based

reasoning module analyzes the service information and determines a pre-diagnosis,” (see Li, Page 2, par. 40). “The repair processing module allows the administration of warranty-specific service based on the pre-diagnosis and the service information,” (see Li, Page 2, par. 41). “The case based reasoning module includes a diagnostic module for analyzing the service information with a symptoms database and a cases database,” (see Li, Page 2, par. 42). “The symptoms database contains information regarding automotive symptoms such as ‘brakes make a grinding noise’ or ‘idle speed is too high’,” (see Li, Page 2, par. 42). “The cases database contains information regarding automobiles exhibiting automotive symptoms contained in the symptoms database,” (see Li, Page 2, par. 42). “For example, the cases database might contain the record that a certain type of vehicle may pull to the right even when the brakes are not applied and that this has been diagnosed as an imbalance in the front end,” (see Li, Page 2, par. 42). “The repair processing module includes a warranty analysis module for determining a warranty status based on a vehicle owner database,” (see Li, Page 2, par. 45). “The vehicle owner database contains information regarding vehicle warranties,” (see Li, Page 2, par. 45). “For example, the vehicle owner database can include data fields such as vehicle ID, warranty type, date information, and maintenance data,” (see Li, Page 2, par. 45).

Thus, as shown above, the user manually enters information regarding the symptoms of the vehicle and system provides a pre-diagnosis or a prognosis of the problem based on the symptoms entered. The system can compare the symptoms with a database to determine whether the pre-diagnosis solution is covered by a warranty. Then the user is directed to a dealer for warranty service. It is important to note that the diagnostic information is received from the customer or from the service associate and not from the vehicle diagnostic equipment. The information entered is only what the user believes to be a problem and not an actual diagnosis

from a vehicle diagnostic equipment. Since the vehicle diagnostic information is received from a source other than the vehicle diagnostic equipment, the Li system can only provide a pre-diagnosis and not what is actually wrong with the vehicle. Thus, the vehicle owner can be lead to believe that the pre-diagnosis solution for the vehicle is under warranty, when the solution based on actual diagnosis may be something that is not covered by warranty. This discrepancy may result because of the incorrect symptoms (observed and not diagnosed) being entered into the system. Relying on the pre-diagnosis solution provided by the Li disclosure may result in unexpected delays in returning the vehicle and higher costs to the vehicle's owner because the actual diagnosis solution does not match the pre-diagnosis solution and is not covered by warranty. Thus, it is better to use the actual diagnostic information from a vehicle diagnostic equipment instead of from observations of the user or the vehicle owner for a more accurate determination of warranty service.

Thus, Li does not disclose, at least, "[a] method for providing vehicle information for use in servicing a vehicle, comprising the steps of: . . . receiving vehicle diagnostic information directly from a vehicle diagnostic equipment operated by the mechanic, the computing device configured to communicate with the vehicle diagnostic equipment; comparing in a processor of the computing device the received vehicle diagnostic information from the vehicle diagnostic equipment with reference diagnostic information stored on a diagnostic information database located by using the entered vehicle identification information; determining in the processor a diagnosis based on the vehicle diagnostic information received from the vehicle diagnostic equipment as a result of the comparison of the vehicle diagnostic information with the reference diagnostic information; identifying in the processor at least one service solution as a result of the comparison of the diagnosis with the service information; . . . and displaying the at least one

service solution and the warranty information as a result of the comparison,” as stated in claim 1. In light of the above remarks, Applicants believe claim 1 to be in condition for allowance and respectfully request withdrawal of this rejection.

Claims 5 and 20 depend directly or indirectly from claim 1. In light of the above remarks, Applicants believe claim 1 to be in condition for allowance, thus these dependent claims are also allowable.

Claim 6 has been rejected similarly to claim 1. For at least the same reasons as stated in connection with claim 1, Li fails to disclose, at least, “[a] system for providing vehicle information for use in servicing a vehicle, comprising: . . . means for receiving configured to receive vehicle diagnostic information into the system directly from a vehicle diagnostic equipment operated by the mechanic; means for comparing the received vehicle diagnostic information with reference diagnostic information located by using the entered vehicle identification information, wherein the means for comparing determines a diagnosis based on the vehicle diagnostic information received from the vehicle diagnostic equipment as a result of the comparison; means for identifying at least one service solution as a result of the comparison; . . . and means for displaying the at least one service solution and the warranty information as a result of the comparison,” as stated in claim 6. In light of the above remarks, Applicants believe claim 6 to be in condition for allowance and respectfully request withdrawal of this rejection.

Claims 10 and 21-25 depend directly or indirectly from claim 6. In light of the above remarks, Applicants believe claim 6 to be in condition for allowance, thus these dependent claims are also allowable.

Claim 11 has been rejected similarly to claim 1. For at least the same reasons as stated in connection with claim 1, Li fails to disclose, at least, “[a] system for providing vehicle

information for use in servicing a vehicle, comprising: . . . a data input configured to receive vehicle diagnostic data directly from a vehicle diagnostic equipment operated by a mechanic; . . . and a microprocessor configured to compare the vehicle diagnostic data received through the vehicle diagnostic equipment with reference diagnostic information from the database and to determine a diagnosis based on the vehicle diagnostic information received from the vehicle diagnostic equipment as a result of the comparison and outputs at least one service related solution as a result of the comparison including indicating if the at least one solution is covered by a warranty,” as stated in claim 11. In light of the above remarks, Applicants believe claim 11 to be in condition for allowance and respectfully request withdrawal of this rejection.

Claims 15-19 and 26-29 depend directly or indirectly from claim 11. In light of the above remarks, Applicants believe claim 11 to be in condition for allowance, thus these dependent claims are also allowable.

As shown in the above quoted rejection, the Office Action alleges that it would have been obvious to one skilled in the art to combine Li and Kirkevold to invent the claimed subject matter of the current application. Applicants respectfully traverse the rejections based on the combination of these two references.

As discussed above, Li is specifically concerned with, and only concerned with, pre-diagnosis. Li describes the typical routine, and shortcomings of that routine, of a service write-up occurring prior to diagnosing the vehicle, and states that the disclosure therein overcomes those problems (*see* Li, Page 1, pars. 6-9). In service industry parlance, such as a restaurant, the problem Li is concerned with would be termed a “front of the house” problem, where the face of the service provider interacts with the customer. Kirkevold, on the other hand is concerned with a “back of the house” problem, where the work is done to provide the service for the customer.



Principally, Kirkevold is concerned with the efficiency of the repair process and quality of the repairs in vehicle service (*see* Kirkevold, Col. 2, lines 52-57). The problems addressed in Kirkevold are caused by the ever increasing complexity of vehicles and the massive volumes of information needed to keep a technician current with the repairs for the wide array of vehicles and systems (*see* Kirkevold, Col. 1, lines 14-57). Some previous solutions discussed by Kirkevold fall short because of their lack of integration causing redundancies (*see* Kirkevold, Col. 2, lines 12-19). The solution to these problems in Kirkevold is to network repair shop devices and employ a standardized integration (*see* Kirkevold, Col. 2, lines 52-57). It is true that Kirkevold discloses that the computer system includes diagnostic equipment (*see* Kirkevold, Col. 4, lines 32-42). However, Kirkevold is not concerned with pre-diagnosis. None of what Kirkevold discloses relates to the problems identified in Li. In fact, applying the diagnostic equipment of Kirkevold in the situation in which Li is concerned, i.e. the pre-diagnosis and write-up phase of the repair process, would frustrate the purpose of Li. Li states that “[i]t is important to note that this vehicle write-up must be completed quickly in order for the servicing department to effectively handle a high volume of repairs,” (*see* Li, Page 1, par. 6). It is counter intuitive to think that taking a vehicle into the repair shop, connecting it to diagnostic equipment, and running vehicle diagnostics would be a quick process. For one, many if not all of the qualified diagnostic equipment users are likely busy with other tasks, or that the necessary diagnostic equipment is being used at the time a new service vehicle needs to be diagnosed. Both of these instances would significantly slow down the write-up process. Further, even if there was an available qualified user and available diagnostic equipment, the process of getting the vehicle into the service area, connecting the device to the vehicle, entering all the proper

information, running the diagnostics, interpreting the information, and then creating a write-up would be so time consuming as to be detrimental to the purpose of the Li application.

Li and Kirkevold are not compatible technologies for the state purpose of Li. Combining the two references would frustrate the purpose of Li and thus one of ordinary skill in the art would not have looked to combine Li and Kirkevold to invent the claimed subject matter of the current application at the timing of filing. Further, because of this frustrated purpose, the combination of Li and Kirkevold is akin to piecemeal construction using the claimed elements in the instant application as a roadmap for inventing the claims. An attempt to combine Li and Kirkevold constitutes improper hindsight reconstruction of the current application.

“Knowledge of applicant’s disclosure must be put aside in reaching [a] determination [of obviousness], . . . impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art,” (MPEP 2142). It would not have been obvious to one normally skilled in the art to determine that an effort to improve the pre-diagnosis and write-up process, which is so reliant on speed, would be benefited by applying a slower and more involved process of using diagnostic equipment to diagnose a service vehicle to invent the subject matter of the current Application at the time of filing without using hindsight.

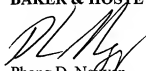
Thus, in further light of the above remarks addressing the combination of references, Applicants further believe that, for at least the stated reasons, the claims of the instant application are in condition for allowance, and respectfully request withdrawal of the rejections.

**CONCLUSION**

In view of the foregoing remarks, Applicants respectfully request that all the objections and rejections to the claims be removed and that the claims pass to allowance. If, for any reason, the Examiner disagrees, please call the undersigned attorney at 202-861-1610 in an effort to resolve any matter still outstanding before issuing another action. The undersigned Attorney is confident that any issue which might remain can readily be worked out by telephone.

In the event this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiencies or credit any overpayments to Deposit Account No. 50-2036 with reference to our Docket No. 87354.1581.

Respectfully submitted,  
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